

REMARKS

Claims 1-42 are pending. In the June 28, 2005 Office Action, the Examiner rejected claims 1-42 under 35 U.S.C. §103(a) as being obvious given U.S. Patent No. 5,994,858 to Miura ("Miura") in view of U.S. Patent No. 5,453,736 to Noren ("Noren"). This rejection is respectfully traversed.

The Examiner alleged that Miura discloses a method and apparatus for detecting an obstruction to a powered window movement, including initiating a learning mode, operating a motor, measuring at least one parameter that corresponds to the operation of the motor to provide a parameter value, and using the parameter value to establish a specific force control value to establish obstacle detection or reversing operation or stoppage or other types of operation. The Examiner acknowledged that "Miura does not disclose a user manipulability setting range for the force control." The Examiner then alleged, however, that Noren discloses a door operating system with a programming control unit using a user manipulability/program module setting range for force control. The Examiner then further argued that:

"It would have been obvious to one of ordinary skill in the art at the time of the invention to combine [the] Miura invention of detecting obstruction to powered window movement with Noren['s disclosure of] a door operating system for accurately detecting obstructions in a moveable barrier in operation through use of a parameter and force control."

It is respectfully submitted that it would not have been obvious to one skilled in the art to combine the teachings of Miura and Noren, as suggested by the Examiner. It is well settled that a reference must provide some motivation or reason for one skilled in the art (working without the benefit of the Applicant's specification) to make the necessary changes in the disclosed device. The mere fact that a reference *may* be modified in the direction of the claimed invention does not make the modification obvious unless the reference expressly or implicitly teaches or suggests the desirability of the modification. In re Kotzab, 55 U.S.P.Q.2d 1313, 1317-18 (Fed. Cir. 2000); In re Fitch, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992); In re Mills, 16 U.S.P.Q.2d 1430, 1432 (Fed. Cir. 1990).

The cited references, i.e., Miura and Noren, fail to meet the basic requirement for a finding of obviousness established by the courts in Kotzab, Fitch, and Mills. There is no suggestion in any of the references of modifying the devices disclosed therein in the direction

of the present application, nor is there any suggestion of the desirability of such modification.

Independent claim 1 recites:

1. A method for use with a barrier controller having a force control that has a user manipulable setting range having a first end and a second end, comprising:
 - initiating a learning mode;
 - operating a motor;
 - measuring at least one parameter that corresponds to operation of the motor to provide a parameter value;
 - using the parameter value to establish a specific force control value;
 - assigning the specific force control value to a specific location of the user manipulable setting range for the force control.

Miura discloses a method and apparatus for detecting an obstruction to the movement of a powered window. Miura in particular discloses a switching unit (1) having a series of switches for controlling movement of the window. [Col. 6, lines 36-40.] The window is opened or closed by a rotating motor (4) as shown in FIG. 1. [Col. 7, lines 57-60.] The power window device shown in FIG. 1 utilizes motor load torque values as a parameter by which to detect obstructions to the motor-powered window movement. [Col. 8, lines 4-6.] In addition, the entire moveable range of the window (between the fully opened and fully closed positions) is divided into a plurality of moving areas on the basis of edge interval data arrival counts. A reference median and a reference allowable value of motor load torque are set for each of the divided moving areas of the window. [Col. 8, lines 8-14.] FIG. 3 shows typical reference medians and reference allowable values of motor load torque established for each of the divided moving areas. [Col. 8, lines 15-17.] These reference medians denote the torques needed to move the window with no substantial obstruction occurring to the window movement. [Col. 8, lines 35-38.] Miura further teaches that every time the window is moved, the existing reference medians are replaced by newly established reference medians – *i.e.*, “the reference medians are continuously learned.” [Col. 8, lines 42-45.]

Noren, on the other hand, discloses a door operating system for opening and closing a sliding door. This door operating system includes a programming module (36). The programming module is a manual control device and includes a keyboard as shown in FIG. 3. The programming module is used for an initial installation or adjustment of an automatic door. [Col. 4, lines 48-50.] The programming module includes various position switches (70A-70I) that control operation of the door (*e.g.*, automatic door opening, partial door

opening, and so forth). [Col. 4, line 65-col. 5, line 19.] The programming module also includes additional buttons (70J-70M) that are used to set various conditions for the operation of the door (e.g., the speed of opening or closing, and the like). [Col. 5, lines 22-32.]

Accordingly, Miura is directed to a system for continuously learning various parameters when a window is being closed. The system of Miura *automatically determines* these parameters without any interaction from the user being required or even possible. Miura effectively takes the human element out of the process when it comes to adjusting or calibrating his obstacle detection mechanism. Noren, on the other hand, discloses a programming module for controlling movement of the sliding door that does not determine *any* parameter values or settings on its own. Instead, it operates according to whatever setting the user has *manually programmed* with the programming module. Noren therefore effectively relies completely upon the human element when it comes to adjusting or calibrating his mechanism.

Moreover, whereas Miura is directed to determining parameter values so that the system can determine when the movement of the window is obstructed, Noren contains no disclosure whatsoever directed to obstruction detection; it simply is not an issue for Noren

Therefore, the disclosures of Miura and Noren are quite different. Whereas Miura determines various setting without any user interaction, Noren operates based only on various settings as are manually input by the user. These two references therefore provide opposite teachings to one another and one of average skilled in the art would no doubt so view them. Instead, the person of average skill in the art would understand these two references to present alternatives to one another with respect to the point at issue. Neither of these references teach that any of the parameters or settings are determined based on a combination of user interaction and automatic determination of settings by the control system as would be required of a system implementing the method recited in claim 1. Accordingly, it is respectfully submitted that one of ordinary skill in the art would have had no motivation to combine the references as suggested by the Examiner in the direction of claims 1-42.

Moreover, even assuming *arguendo* that it would have been obvious to combine the teachings of Miura and Noren in the direction of the claims¹, the resultant combination would still not render the claims obvious. For example, claim 1 recites: “using the parameter value to establish a specific force control value; [and] assigning the specific force control value to a specific location of the user manipulable setting range for the force control.” Neither Miura nor Noren, alone or in combination, have any teachings directed to the assigning of the specific force control value to a specific location of the user manipulable setting range for the force control.

As the Examiner stated in the Office Action, Miura fails to disclose a user manipulable setting range for force control. [Office Action, P. 3, lines 9-10.] At the same time, however, Noren also fails to disclose such assigning of a specific force control value to a specific location of a user manipulable setting range for force control. Neither Miura nor Noren therefore disclose anything about a user manipulable “setting range.” Noren teaches that the user can change settings for a function, but does not disclose anything about assigning a control value to a specific location of a user manipulable setting range. Instead, in Noren, a setting range already exists and the user selects one of the settings from the range instead of assigning a value to a specific location within a user manipulable setting range.

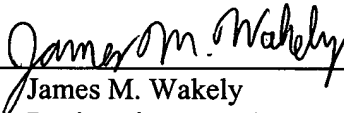
Accordingly, claim 1 and claims 2-29 depending therefrom directly or indirectly (through claim dependencies) distinguish over a combination of Miura and Noren. Claims 30, 37, 38, and 40 contain distinguishing limitations similar to those of claim 1 discussed above. Therefore, claims 30, 37, 38, and 40 also distinguish over a combination of Miura and Noren for at least the reasons discussed above with respect to claim 1. Claims 31-36, 39, and 41-42 depend from claims 30, 38, and 40, respectively, and therefore also distinguish over a combination of Miura and Noren for at least the reasons discussed above with respect to claims 30, 38, and 40, respectively.

Therefore, for the reasons discussed above, it is respectfully submitted that the rejection of claims 1-42 under 35 U.S.C. §103(a) should be withdrawn.

¹ Applicant does not mean to suggest or imply that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Miura and Noren. Applicant believes such combination would not have been obvious. Applicant assumes so solely for the sake of argument.

Applicant believes that the foregoing amendments place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Chicago telephone number (312) 577-7000 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

By: 
James M. Wakely
Registration No. 48,597

Date: September 28, 2005

FITCH, EVEN, TABIN & FLANNERY
Suite 1600
120 South LaSalle
Chicago, Illinois 60603-3406
Telephone: (312) 577-7000
Facsimile: (312) 577-7007